12

Claims

1.   A communication system arranged to communicate under the Transmission Control Protocol (TCP), the system being arranged to not accept a TCP connection request unless a connection has already been negotiated.

5

2.   A communication system according to claim 1, wherein the connection is negotiated by receipt at the communication system of a connection request message.

3.   A communication system according to claim 1 or 2, wherein the request

10   message comprises a datagram.

4.   A communication system according to claim 2 or 3 wherein the connection request message includes data on the connection requested.

15   5.   A communication system according to claim 2, 3 or 4, wherein the connection request message includes information on a source of the connection request message.

6.   A communication system according to any one of claims 2 to 5, wherein the communication system is arranged to evaluate the connection request message prior to

20   accepting a TCP connection.

7.   A communication system according to claim 6, wherein the evaluation includes authenticating data within the connection request message.

25   8.   A communication system according to claim 6 or 7, wherein the evaluation includes authenticating the source of the connection request message

9.   A communication system according to claim 6, 7 or 8 wherein the communication system is arranged to negotiate an encryption key during evaluation.

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10.   A further communication system arranged to communicate using TCP with the communication system of any of the preceding claims, the further communication

13

system being arranged to negotiate a connection with the communication system prior to transmitting a TCP connection request.

11.   A communication system according to any preceding claim wherein the or each communication system comprises a computer network communication protocol stack.

12.   A communication system according to any of claims 1 to 10, wherein the or each communication system comprises a network communications device.

13.   A communication system according to claim 12, wherein the network communications device comprises one of a router, bridge, gateway, firewall or switch.

14.   A data communications method for communicating using the Transmission Control Protocol (TCP) comprising:
    requiring a connection negotiation with a source system to be completed prior to acceptance of TCP communication packets from the source system.

15.   A data communications connection method for the Transmission Control Protocol (TCP) comprising the steps of:
    prior to the establishment of a TCP/IP connection the initiating party sending a connection request message to a receiving party;
    receiving the connection request message at the receiving party;
    opening a TCP connection at the receiving party for the initiating party, and,
    communicating between the initiating and receiving parties using TCP communications.

16.   A computer program comprising computer program code means for performing all of the steps of any of claims 14 or 15 when said program is run on a computer.

14

17.   A computer program as claimed in claim 16 embodied on a computer readable
medium.